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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/605,628	02/22/1996	CHARLES B. SIMONE	S4264.000/P0	8170

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DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
2101 L STREET NW
WASHINGTON, DC 20037-1526

EXAMINER

PORTER, RACHEL L

ART UNIT	PAPER NUMBER
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3626

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/605,628

Applicant(s)

SIMONE, CHARLES B.

Examiner

Rachel L. Porter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 29 August 2001 & 03 August 2004 *J.T. 8/6/04*
- 1) ☒ Responsive to communication(s) filed on ~~14 December 1998~~.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Notice to Applicant

1. Pursuant to the Remand under 37 CFR 1.193(b)(1) by the Board of Patent Appeals and Interferences on 29 August 2001 and in accordance with the Interview conducted with Applicant on 03 August 2004, Applicant's request for reconsideration of the finality of the rejection of the Office action mailed 30 August 30, 1996 (and re-iterated in the Examiner's Answer mailed 24 April 1998) is persuasive and, therefore, the finality of that action is withdrawn. A new grounds of rejection under 35 U.S.C. 101 and an re-iteration of the art rejection under 35 U.S.C. 103 is provided hereinbelow.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.

3. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences

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(BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts." The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little,

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if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a “useful, concrete and tangible result.” See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no “business method exception” since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that “[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112.” See *State Street Bank & Trust Co.* at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. *State Street* never addressed the first part of the analysis, i.e., the “technological arts” test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) **was already determined to be within the technological arts** under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a “useful, concrete and tangible result,” **but that it must also be limited to the technological**

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arts in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The

Board very explicitly set forth this point:

[1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. See *Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms the heart of the invention before us does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed

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to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669, 1671 (BdPatApp&Int 2001)

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, exemplary claim 1 is drawn to a "computer system for evaluating insurability of at least one individual", but lacks a clear and deliberate nexus to any computerized or electronic device within the body of the claim.

As to technological arts recited in the preamble (i.e., "a computer system"), mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

In the present case, the recited elements in claim 1 of "survey means", "entry means", "memory", etc., devoid of any clear nexus computer system, do not apply, involve, use, or advance the technological arts since all of the individual components

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may broadly read on non-technological elements such as a pencil and paper ("survey means" and "entry means"), a file cabinet or table ("memory"), etc.. Similarly, the steps recited in claim 7 can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to conceptually evaluate a person's "insurability".

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the invention is directed to a "method (or system) for evaluating insurability of at least one individual", and thus produces a useful, concrete, and tangible result. Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, exemplary claims 1 and 7 deemed to be directed to non-statutory subject matter. Dependent claims 2-6 and 8 do not provide any further limitations that would serve to apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts", and are thus deemed to be non-statutory because they are not limited to the technological arts; all recited steps could be performed manually by a human

In conclusion, the Examiner submits that Appellant's claims do not meet the technological arts requirement under 35 U.S.C. 101, as articulated in *Musgrave*, *Toma*, and *Bowman* as well as the Manual of Patent Examining Procedure Section 2106.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeTore et al. (4,975,840).

(A) As per claim 1, DeTore et al. disclose a computer system for evaluating a potentially insurable risk. The system comprises an application database which includes:

a survey for gathering information pertaining to an individual's health and medical test; an entry means for inputting the gathered information (fig. 1, element 16);

a memory for receiving and storing the gathered information (fig. 1, element 12);
and

assigning weight and risk value to the stored information (col. 41, lines 48-64).

DeTore et al. further disclose:

determining the total of weight and risk values and comparing the total values to the pre-defined values on the same claims (col. 42, lines 55-63) and a message or suggestion is provided for improving health and decreasing risk (col. 2, lines 31-38; cols. 19-22, "Treatment" section --shows that messages are provided to an individual having a medical problem, hypertension, as well as suggestions on how to improve their health conditions; and cols. 35-36).

The system also determines the level of insurance risk and communicates the level of risk (col. 18, lines 11-32).

DeTore et al. fail to recite that the information gathered from an individual also includes the lifestyle of that individual. However, many medical results are typically based upon the lifestyle of an individual. For example, certain behavioral patterns in lifestyle have a direct affect on an individual's medical status.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include lifestyle information as an independent category along with medical and health data gathered by the DeTore et al. system. The motivation to do so would be to quantitatively assign weight and risk value to lifestyle data for the reason of accurately influencing insurance rates.

(B) Claim 2 recites the risk values are assigned negative values for actions that increase risks and positive values for actions that decrease insurance risks. However, it is well known to one of ordinary skill in the insurance risk evaluation art that positive and negative values to insurance risks is indicative of the strengths and liabilities of an individual's insurability (see Fig. 12 and col. 18, lines 33-63 of DeTore).

(C) As per claim 3, DeTore et al. disclose a memory to store underwriter information (fig. 1, elements 24 and 26).

(D) As per claim 4, DeTore et al. disclose a questionnaire memory to store questionnaires and that an individual can select appropriate responses to lifestyle questions (col. 12, line 37 through col. 13, line 16).

(E) Claims 5-6 recite specific behavioral or lifestyle conditions of an individual such as the food intake of an individual, tobacco use, alcohol use, and an individual's

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pregnancy status. These are necessary information which are taken into consideration by an insurance agent. Note col. 5, lines 31-32 & 40-57 and col. 10, lines 42-55 and paragraph bridging col. 19-20 to col. 21-22 of DeTore, which states: "... Factors associated with the development of essential hypertension include: positive family history of hypertensive disease, high salt intake, obesity, certain types of psychological stress, smoking, and a heavy intake of alcohol" (emphasis added). As per the recitation of pregnancy status, it would have been obvious to one of ordinary skill in the art to include pregnancy status within an individual's lifestyle information when buying insurance with the motivation of more accurately determining the insurable risk for that condition since DeTore clearly teaches the gathering of medical data such as prior medical problems, existing conditions, medications, and "any other information received from the applicant which may have a bearing on insurability" (DeTore; col. 4, lines 24-30) (emphasis added).

(F) Method claim 7 repeats the underlying process steps of the elements recited within system claim 1. Since the apparatus disclosed by DeTore also performs the underlying processes and activities recited (e.g., gathering information; receiving and storing; assigning weights values; assigning risk values; determining a total value; creating an insurance comparison; choosing pre-defined suggestions; providing messages; determining a level of risk; and communicating the risk level), claim 7 is therefore rejected under the same rationale given for claim 1.

(G) As per claim 8, DeTore et al. disclose that the gathering of information includes providing an individual with a questionnaire (col. 12, lines 62-66). It is readily apparent

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that, if a set of questions are provided to the individual, responses or answers should be received.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703)305-9588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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RP


JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600